## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application

**Listing of Claims:**

1. (Currently Amended) A dishwasher, comprising:

a housing:

a tub in the housing to hold tableware;

an injector assembly for injecting water on the tableware in the tub; and

a water softener device for softening the water supplied to the injector assembly, the water softener device comprising:

a first container holding an ion-exchange resin for removing heavy metal and metal ions from the water;

a second container holding a predetermined amount of salt and salt water to supply the salt water to the first container to recycle the ion-exchange resin that is saturated;

a float installed in the second container; and

a sensor provided to the second container to sense a concentration of the salt water ~~according to~~ based on a distance ~~from~~ of the float from the sensor and generate a signal corresponding to the sensed distance.

2. (Original) The dishwasher as claimed in claim 1, wherein the float fluctuates in height according to the concentration of the salt water.

3. (Currently Amended) The dishwasher as claimed in claim 1, wherein a guide for guiding floatage of the float is further provided ~~to~~ in the second container.

4. (Original) The dishwasher as claimed in claim 1, wherein the float comprises a body and a magnet attached to the body.

5. (Original) The dishwasher as claimed in claim 1, wherein the sensor senses an amount of the salt in the second container according to the distance from the float.

6. (Original) The dishwasher as claimed in claim 1, wherein the sensor senses a shortage of the salt in the second container according to the distance from the float.

7. (Original) The dishwasher as claimed in claim 1, wherein the sensor generates a current if the distance from the float is smaller than a predetermined distance.

8. (Original) The dishwasher as claimed in claim 1, wherein the sensor generates a current to vary according to the distance from the float.

9. (Original) The dishwasher as claimed in claim 1, further comprising an information device informing the concentration of the salt water according to a signal generated from the sensor.

10. (Original) The dishwasher as claimed in claim 1, further comprising an information device informing a salt amount in the second container.

11. (Original) The dishwasher as claimed in claim 10, wherein the information device informs a shortage of the salt amount.

12. (Currently Amended) A water softener ~~of~~ device for a dishwasher, the water softener device softening water supplied to an injector assembly of the dishwasher, the water softener device comprising:

a first container holding an ion-exchange resin for removing heavy metal and metal ions from the water;

a second container holding a predetermined amount of salt and salt water to supply the salt water to the first container to recycle the ion-exchange resin that is saturated;

a float installed in the second container; and

a sensor provided to the second container to sense a concentration of the salt water ~~according to~~ based on a distance ~~from~~ of the float from the sensor and generate a signal corresponding to the sensed distance.

13. (Currently Amended) The water softener device as claimed in claim 12, wherein the float fluctuates in height according to the concentration of the salt water.

14. (Currently Amended) The water softener device as claimed in claim 12, wherein a guide for guiding floatage of the float is further provided to the second container.

15. (Currently Amended) The water softener device as claimed in claim 12, wherein the float comprises a body and a magnet attached to the body.

16. (Currently Amended) The water softener device as claimed in claim 12, wherein the sensor senses an amount of the salt in the second container according to the distance from the float.

17. (Currently Amended) The water softener device as claimed in claim 12, wherein the sensor senses a shortage of the salt in the second container according to the distance from the float.

18. (Currently Amended) The water softener device as claimed in claim 12, wherein the sensor generates a current if the distance from the float is smaller than a predetermined distance.

19. (Currently Amended) The water softener device as claimed in claim 12, wherein the sensor generates a current to vary according to the distance from the float.

20. (Currently Amended) The water softener device as claimed in claim 12, further comprising an information device informing the concentration of the salt water according to a signal generated from the sensor.

21. (Currently Amended) The water softener device as claimed in claim 12, further comprising an information device informing a salt amount in the second container.

22. (Currently Amended) The ~~dishwasher~~ water softener device as claimed in claim 21, wherein the information device informs a shortage of the salt amount.